

03050109-120

(*Reedy River/Lake Greenwood*)

General Description

Watershed 03050109-120 is located in Greenville and Laurens Counties and consists primarily of the **Reedy River** and its tributaries from Huff Creek to **Lake Greenwood**. The watershed occupies 79,267 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Madison-Davidson-Pacolet-Wilkes series. The erodibility of the soil (K) averages 0.26 and the slope of the terrain averages 15%, with a range of 2-40%. Land use/land cover in the watershed includes: 70.0% forested land, 22.2% agricultural land, 5.1% barren land, 1.4% water, 0.9% urban land, and 0.4% forested wetland (swamp).

This section of the Reedy River accepts drainage from the upper Reedy River watershed, Martin Creek, and Horse Creek before flowing into and through Boyd Mill Pond. The river then accepts the drainage from Walnut Creek and forms an arm of Lake Greenwood. There are a total of 169.9 stream miles and 1,048.2 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-778	BIO	FW	REEDY RIVER AT SR 68
S-862	BIO	FW	HORSE CREEK AT SR 69
S-070	W	FW	REEDY RIVER AT US 76
S-311	S/SUMM	FW	BOYD MILL POND 0.6 KM W OF DAM
S-861	BIO	FW	WALNUT CREEK AT SR 64
S-021	P/INT	FW	REEDY RIVER AT S-30-06, E OF WARE SHOALS
S-308	S/SUMM	FW	LAKE GREENWOOD, REEDY RIVER ARM 150YDS ABOVE RABON CREEK
S-022	W	FW	LAKE GREENWOOD, REEDY RIVER ARM AT S-30-29

Reedy River - There are three SCDHEC monitoring sites along this section of the Reedy River. Aquatic life uses are partially supported at the upstream site (**S-778**) based on macroinvertebrate community data. Aquatic life uses are fully supported at the midstream site (**S-070**), but recreational uses are partially supported due to fecal coliform bacteria excursions. At the furthest downstream site (**S-021**), aquatic life uses are fully supported. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration and a significant decreasing trend in total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are fully supported at this site.

Horse Creek (S-862) - Aquatic life uses are fully supported based on macroinvertebrate community data.

Boyd Mill Pond (S-311) - Boyd Mill Pond is a 182-acre impoundment on the Reedy River, with a maximum depth of approximately 31.2 feet and an average depth of approximately 12.1 feet. The lake's watershed comprises 244.8 square miles. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations.

Aquatic life uses are not supported due to pH and total phosphorus concentration excursions. Recreational uses are fully supported.

Walnut Creek (S-861) - Aquatic life uses are fully supported based on macroinvertebrate community data.

Reedy River Arm of Lake Greenwood – There are two SCDHEC monitoring sites along the Reedy River arm of Lake Greenwood. Aquatic life uses are not supported at the upstream site (**S-308**) due to pH and total phosphorus excursions. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Recreational uses are fully supported.

Aquatic life uses are not supported at the downstream site (**S-022**) due to pH and total phosphorus concentration excursions, compounded by a significant decreasing trend in dissolved oxygen concentration. There is a significant decreasing trend in pH. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are fully supported and there is a significant decreasing trend in fecal coliform bacteria, suggesting improving conditions for this parameter.

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-062	GB	SAPROLITE	FORK SHOALS SHALLOW

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
REEDY RIVER WR GRACE & CO./MADDEN-KERNELLS MINE PIPE #: 01A-01C, 02A-02C FLOW: M/R	SCG730035 MINOR INDUSTRIAL
HORSE CREEK VULCAN CONSTR. MATERIALS CO./PRINCETON QUARRY PIPE #: 001-003 FLOW: M/R	SC0047414 MINOR INDUSTRIAL PERMIT INACTIVATED 3/31/04

Nonpoint Source Management Program

Mining Activities

<i>MINING COMPANY MINE NAME</i>	<i>PERMIT # MINERAL</i>
WR GRACE & CO. MADDEN-KERNELLS MINE	0565-59 VERMICULITE
VULCAN CONSTR. MATERIALS CO. PRINCETON QUARRY	1072-45 GRANITE

Growth Potential

There is generally a low potential for growth in this watershed, which contains a portion of the Town of Waterloo. Some growth could result from the crossing of U.S. 76 to the City of Laurens and from U.S. 25 to the City of Greenville. Medium density residential areas should expand along the river in Laurens County.